

Work Order ID 111083

\*111083\*

Page 1

January-08-14 12:53:46 PM

Item ID: D3651-3

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Base

Stop

\*NS2\*

Start Date: 1/08/14 Start Qty: 4.00

\*4\*

Cust Item ID:

Required Date: 1/08/14 Req'd Qty: 4.00

\*4\*

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 14-01-10 Tooling:

Date:

Run Start

\*NR1\*

QC: \_\_\_\_\_

Date: \_\_\_\_\_ SPC (Y/N):

Date: \_\_\_\_\_

Stop

\*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr								
D3651	Rev B								

100 \*100\* FLOW WATER JET 0.00 4 0 DAS 23 9-89 14-08-17  
Waterjet

FLOW CNC Waterjet 1-Cut as per Dwg D3651 Dwg Rev: B Prog Rev: B 2-  
304 .018" Deburr if necessary

110 \*110\* QC2- Inspect parts off machine FAI/FAIB 0.00 4 0 DAS 23 9-89 14-08-17  
QC

Quality Control Memo 0.00

120 \*120\* QC8- Inspect parts - second check 0.00 4 0 DAS 38 9-89 14-08-18  
QC

Quality Control Memo 0.00

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: \_\_\_\_\_

Work Order update only 

Work Order: _____	DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

## FAULT CATEGORY

Landing Gear	General			
Bending	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>
Centre Not Concentric	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>
Cracks	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>
Crimp/Kink/Ripple/Wave	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>
Cuffs	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>
Crushing	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>	
Heat Treat	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	Other <input type="checkbox"/>
Inspection Strip in Tube	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>		
Marks/Chatter	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>		
Turning Sequence	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>		
Wave/Twist in Tube	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>		

**Work Order ID 111083**

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**\*111083\***

Page 2

Item ID: D3651-3

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Base

Stop

**\*NS2\***

Start Date: 1/08/14 Start Qty: 4.00

**\*4\***

Cust Item ID:

Required Date: 1/08/14 Req'd Qty: 4.00

**\*4\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130

**\*130\***

Brake NC

NC BRAKE

0.00

DAS  
30  
9-89

4

14/12/01

Brake NC

Memo

0.00

140

**\*140\***

QC

QC5- Inspect part completeness to step on W/O

0.00

DAS  
38  
9-89

Quality Control

Memo

0.00

(4)

DEC 01 2014

150

**\*150\***

Packaging

Identify as per dwg & Stock Location C A

0.00

DAS  
30  
9-89

4

14/12/02

Packaging

Memo

0.00

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only 

Work Order: _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS				
Part No. _____	Rework	Scrap	Use-as-is	Skid-tube	Crosstube	Water Jet	Engineering	
NCR No. _____	Suspected	Unapproved		Machining	Small Fab	Prod. Eng. Coor.	Quality	
				Thermoforming	Finishing	Rec/Store/Packaging	Other	
				Large Fab	Composite	Supplier		

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

## FAULT CATEGORY

Landing Gear		General			Folio/Program			Outside Dimensions		Pressure/Forced	
	Bending		Bend								
	Centre Not Concentric		BOM/Route								
	Cracks		Broken/Damage/Defect								
	Crimp/Kink/Ripple/Wave		Burrs								
	Cuffs		Contamination								
	Crushing		Countersink								
	Heat Treat		Cut Too Short								
	Inspection Strip in Tube		Drawing								
	Marks/Chatter		Drill Holes								
	Turning Sequence		Finish								
	Wave/Twist in Tube		Fit/Function								

**Work Order ID 111083****\*111083\***

Page 3

January-08-14 12:53:46 PM

Item ID: D3651-3

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Base

Start Date: 1/08/14 Start Qty: 4.00

**\*4\***

Cust Item ID:

Required Date: 1/08/14 Req'd Qty: 4.00

**\*4\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start

**\*NR1\***

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

**\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160

QC21- Final Inspection - Work Order Release

**\*160\***

QC

Quality Control

0.00

Memo

0.00

14/12/2014

14-12-02

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only 

Work Order: _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>			
NCR No. _____	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Quality <input type="checkbox"/>		
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>		Other <input type="checkbox"/>	

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

Landing Gear	General								
	<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Folio/Program	<input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Pressure/Forced				
	<input type="checkbox"/> Centre Not Concentric	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Grain	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Set-up				
	<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damage/Defect	<input type="checkbox"/> Hardware	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Temperature/Cure				
	<input type="checkbox"/> Crimp/Kink/Ripple/Wave	<input type="checkbox"/> Burrs	<input type="checkbox"/> Inspection Incomplete/Unqualified	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Weld				
	<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Moved	<input type="checkbox"/> Wrong Stock Pulled				
	<input type="checkbox"/> Crushing	<input type="checkbox"/> Countersink	<input type="checkbox"/> Misaligned/off center	<input type="checkbox"/> Positioned Wrong	<input type="checkbox"/> Other				
	<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Power Loss/Surge					
	<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Drawing	<input type="checkbox"/> Misread						
	<input type="checkbox"/> Marks/Chatter	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Off-set						
	<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Calibration						
	<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Fit/Function	<input type="checkbox"/> Out of Sequence						

**Picklist Print**

January-08-14 12:53:45 PM

Page 1

**Work Order ID:** 111083**Parent Item:** D3651-3**Parent Item Name:** Base**Start Date:** 1/08/14**Required Date:** 1/08/14**Start Qty:** 4.00**Required Qty:** 4.00

**Comments:**

IPP Rev:A	New Issue	07-09-27	DD verified by: EC
IPP Rev:B	ECN 1113P	08-01-22	DD
IPP Rev:C	ecn1162	08-04-02	DD verified by: EC

<b>Component Item ID/ Item Name</b>	<b>Replacement Item ID</b>	<b>Mfg/ Purch</b>	<b>Bin Item</b>	<b>Primary Location</b>	<b>Last Location</b>	<b>Route Seq ID</b>	<b>Unit of Measure</b>	<b>Qty on Hand</b>	<b>Qty per Kit</b>	<b>Total Qty</b>	<b>Qty Issued DAS</b>	<b>Date Issued</b>	<b>Status</b>
M304S26GA 304/316 0.018 SHEET		Purchased	No			100	sf	149.0000	0.474	1.9957896 2.0	23 9.89	14-08-17	

<b>Location</b>	<b>Loc Qty</b>	<b>Loc Code</b>
MAT020	149	
122753	26	
123135	123	123135

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

## Work Order update only

Work Order: _____ Part No. _____ NCR No. _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS														
			Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>												
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector										
Design																			
Doc/Data																			
Equip/Tooling																			
Handling/Pre																			
Material																			
Operator																			
Offset/Setup																			
Process																			
Supplier																			
Training																			
Transport																			
Unapproved																			
FAULT CATEGORY																			
Landing Gear			General																
Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube <input type="checkbox"/>			Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function <input type="checkbox"/>							Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/>			Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/>			Pressure/Forced Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/>		Other <input type="checkbox"/>	

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	<b>111083</b>
<b>Description:</b> Base	<b>Part Number:</b>	<b>D3651-3</b>
<b>Inspection Dwg:</b> D3651 <b>Rev:</b> B		<b>Page 1 of 1</b>

## FIRST ARTICLE INSPECTION CHECKLIST

## X First Article      Prototype

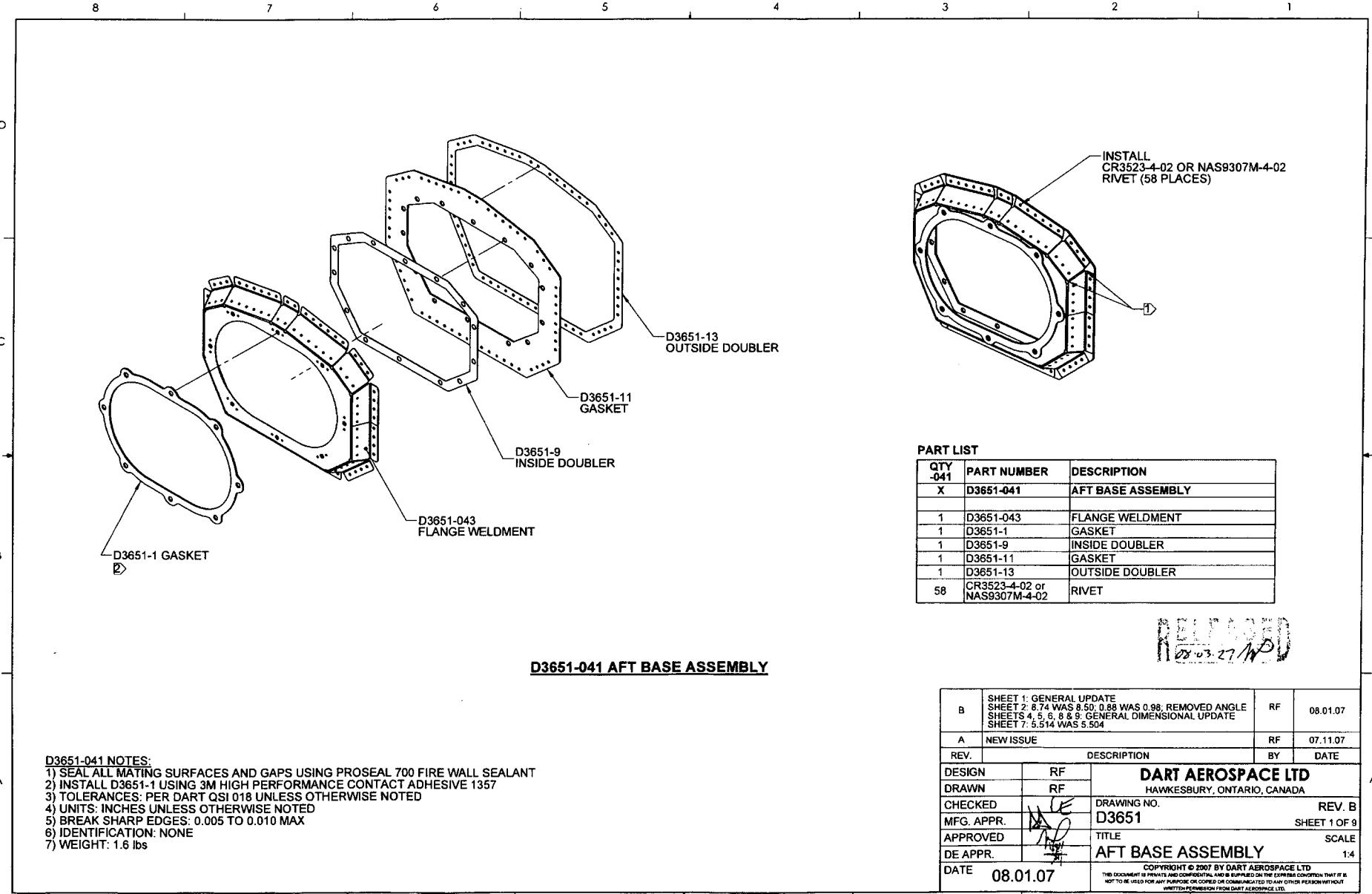
~~DAS~~

DAS

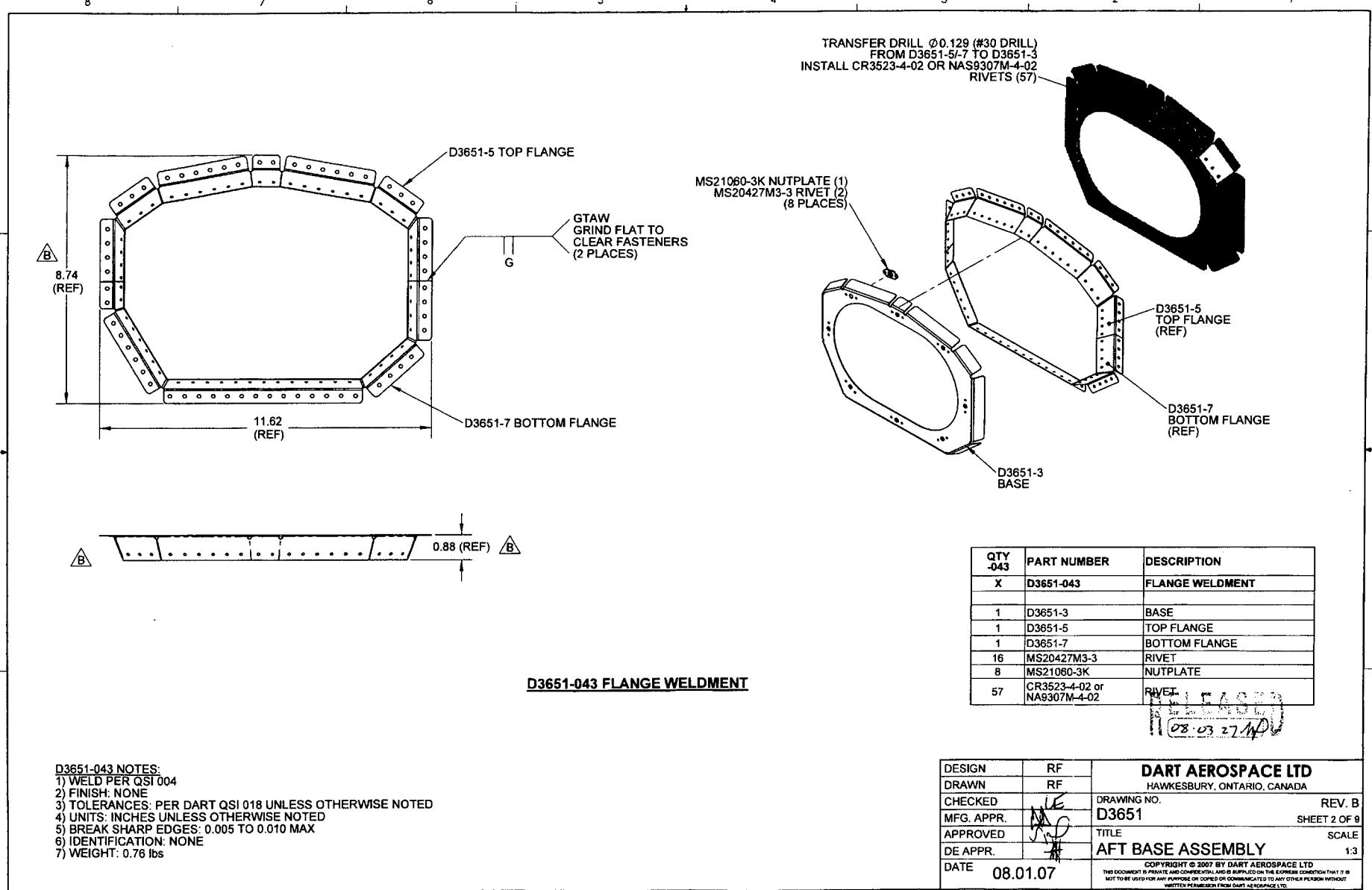
Measured by:	23 9-89	Audited by:	28 9-89	Prototype Approval:	N/A
Date:	14-08-17	Date:	<del>14/08/18</del>	Date:	N/A

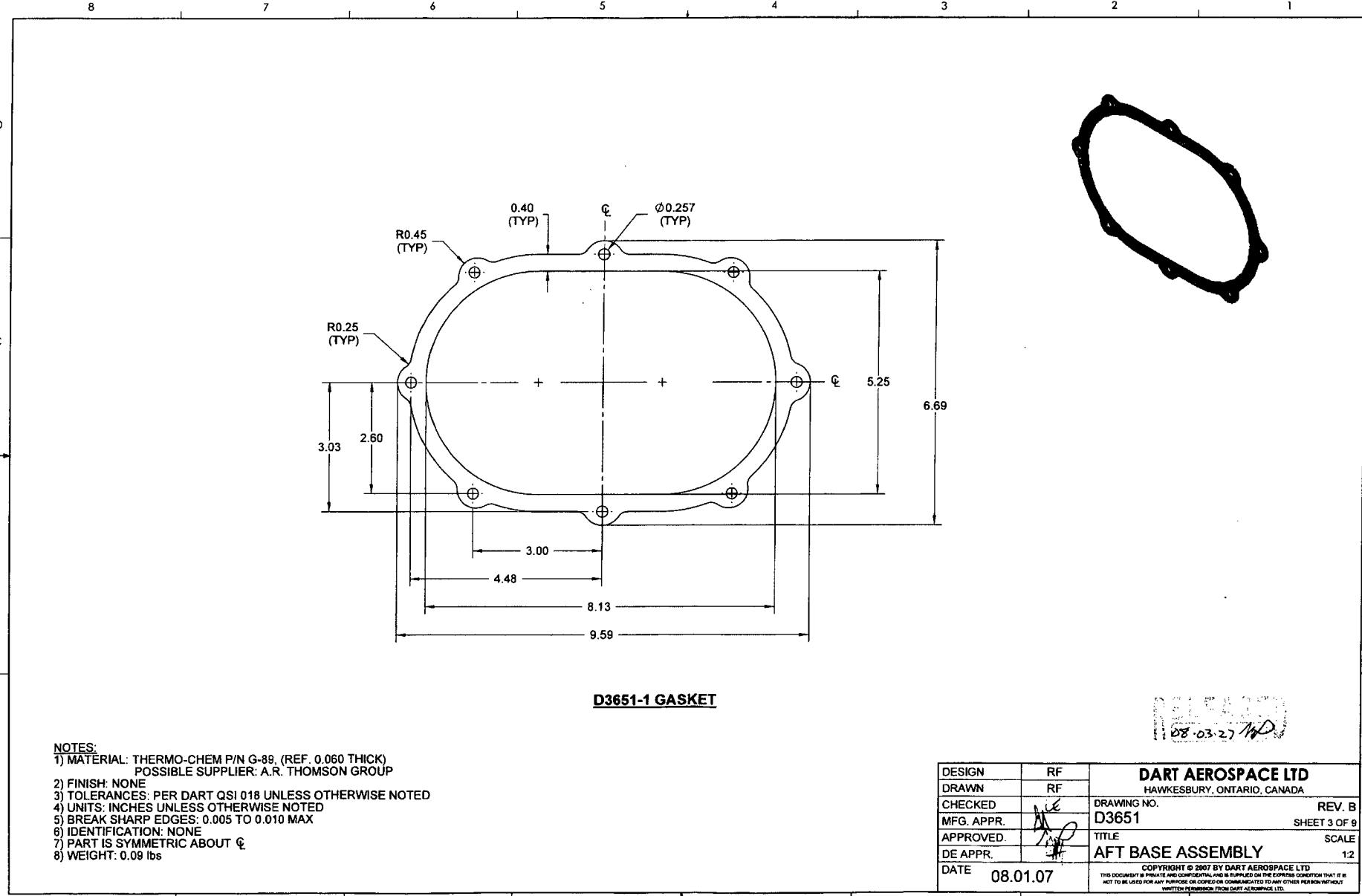
Rev	Date	Change	Revised by	Approved
A	08.04.17	New Issue	KJ/DD	
B	08.10.07	0.018 dimension added	KJ/DD	

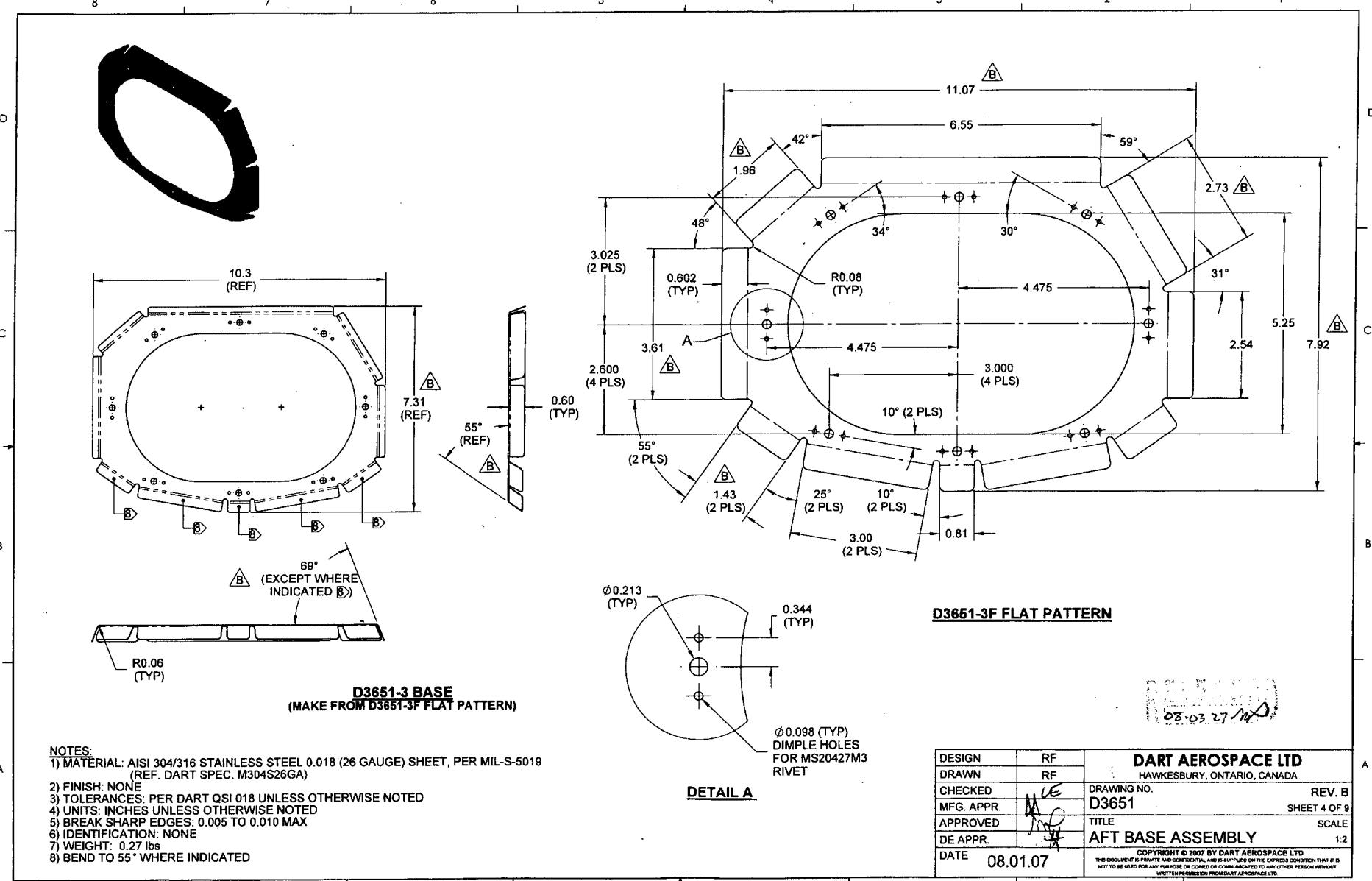
111083  
MLJ  
140110

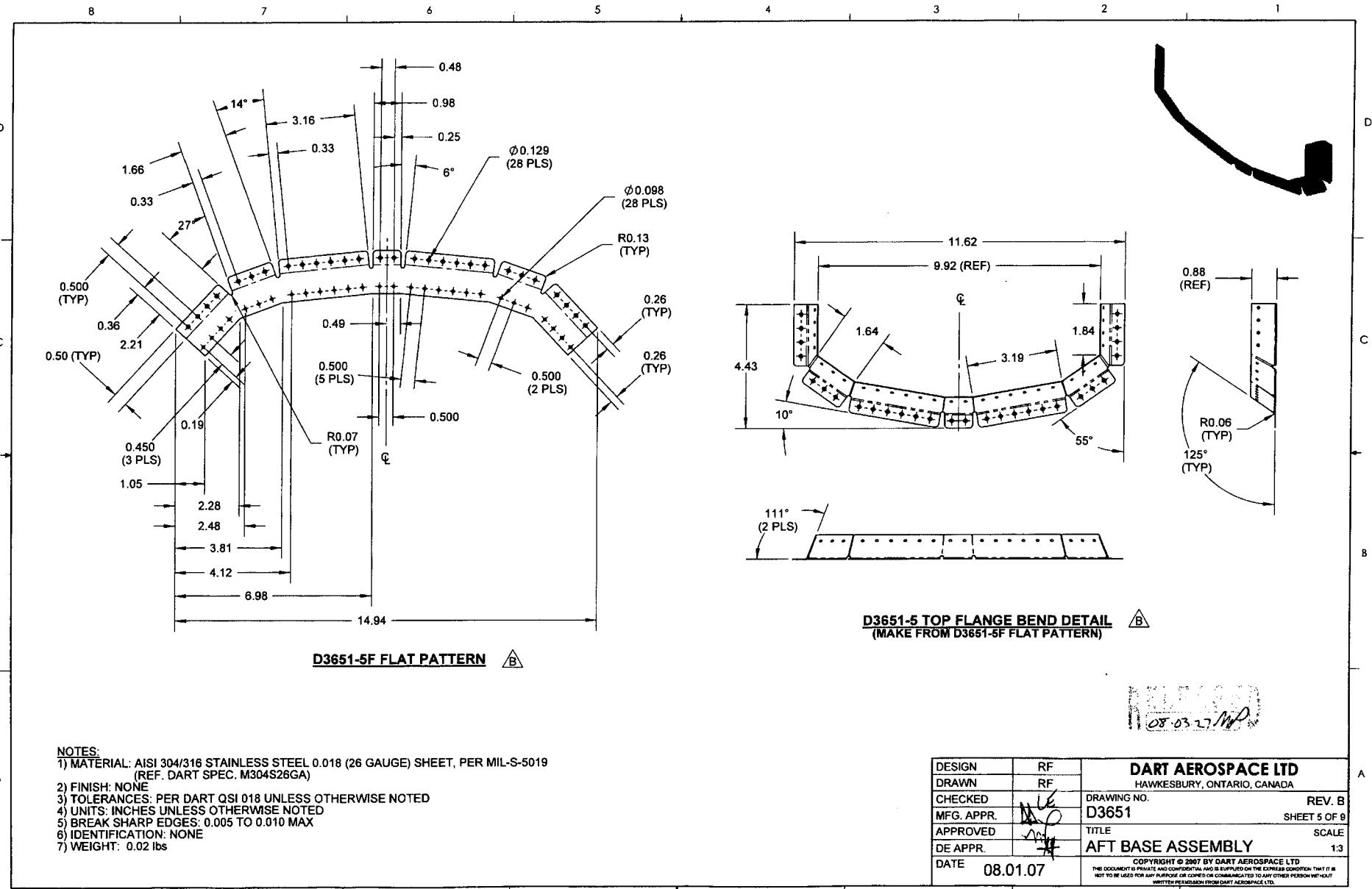


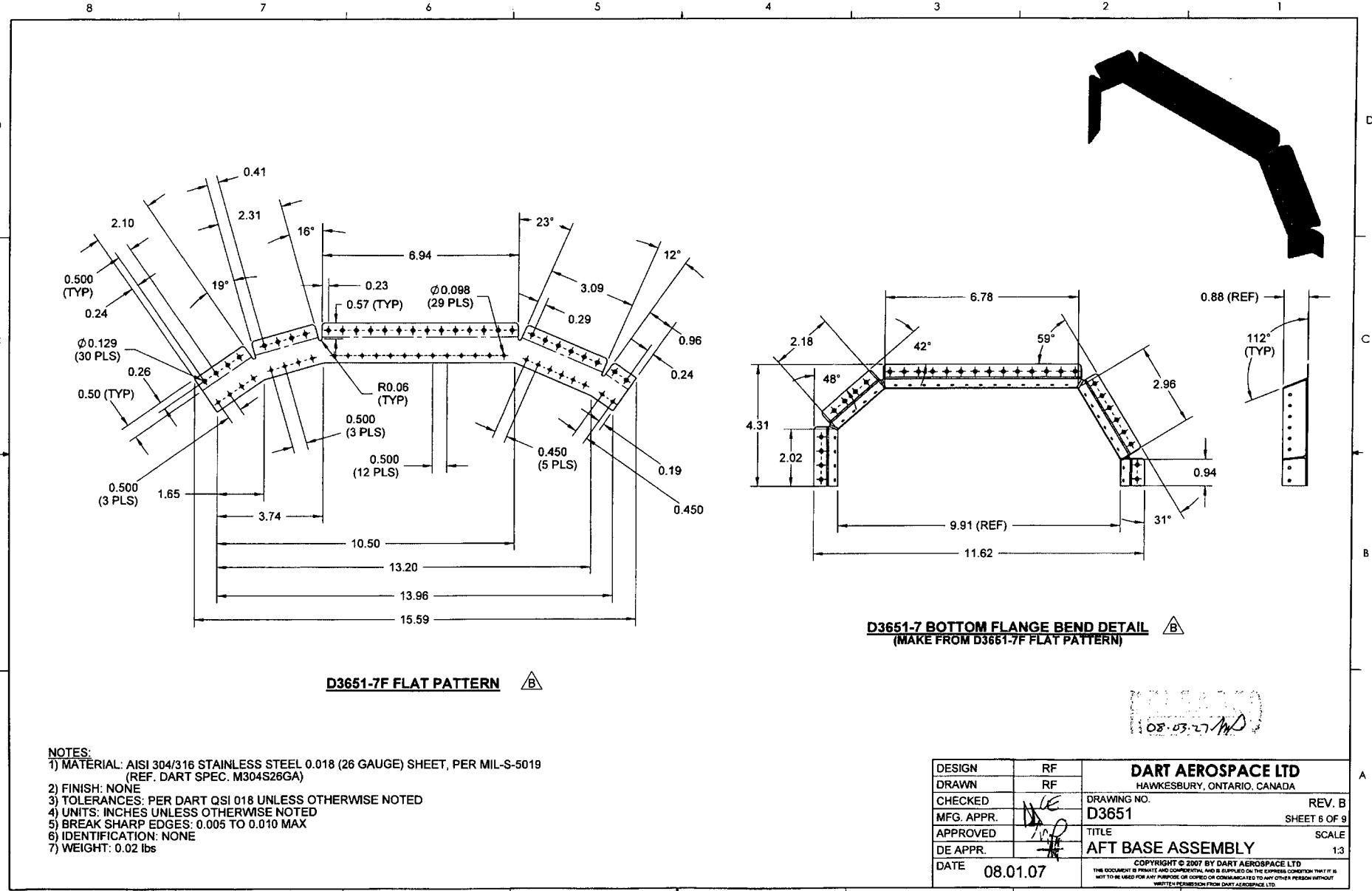
B	SHEET 1: GENERAL UPDATE SHEET 2: 8.74 WAS 8.50, 0.88 WAS 0.98; REMOVED ANGLE SHEETS 4, 5, 6, 8 & 9; GENERAL DIMENSIONAL UPDATE SHEET 7: 5.514 WAS 5.504	RF	08.01.07
A	NEW ISSUE	RF	07.11.07
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3651	SHEET 1 OF 9
APPROVED		TITLE	SCALE
DE APPR.		AFT BASE ASSEMBLY	1:4
DATE	08.01.07	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

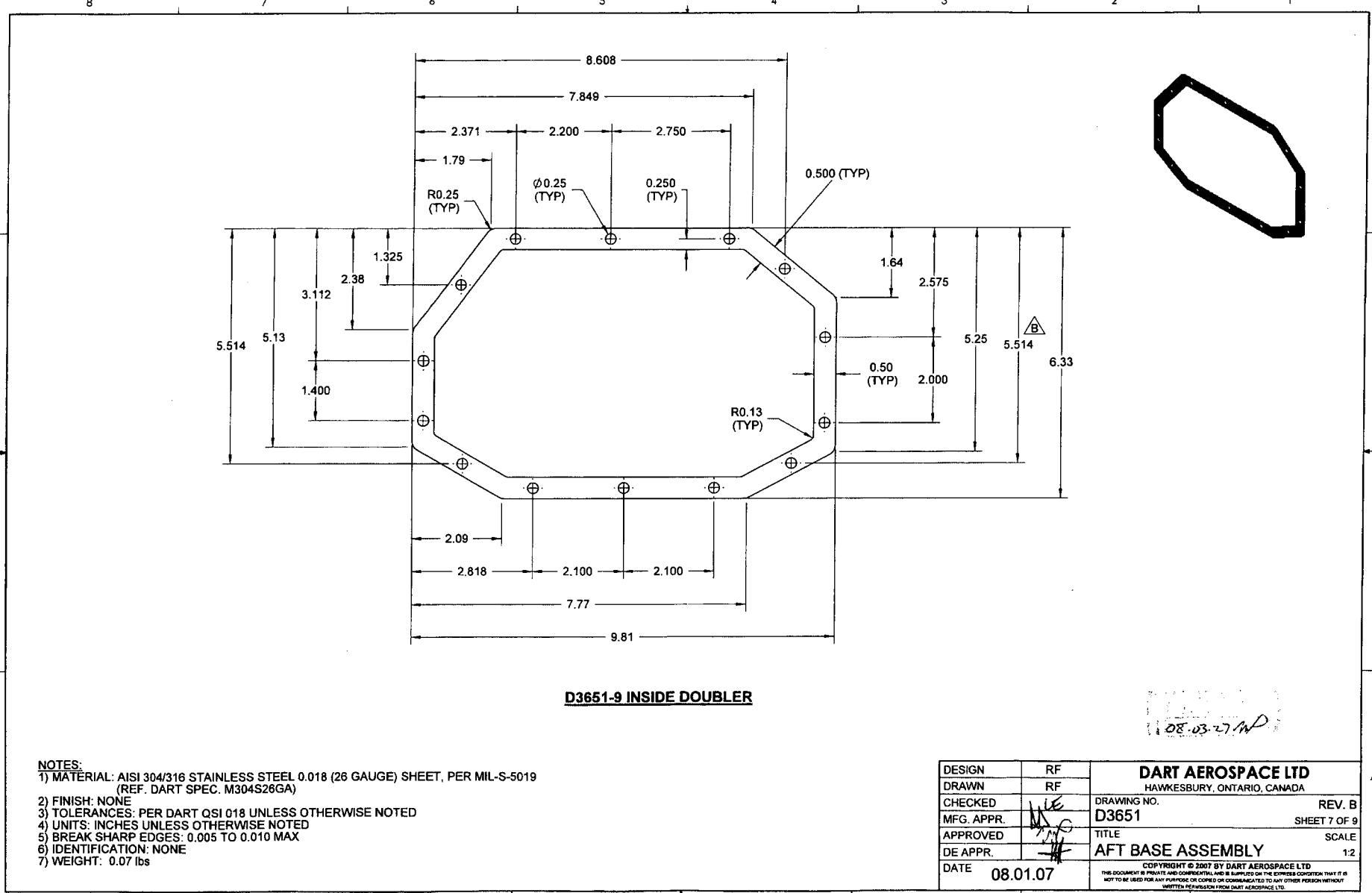






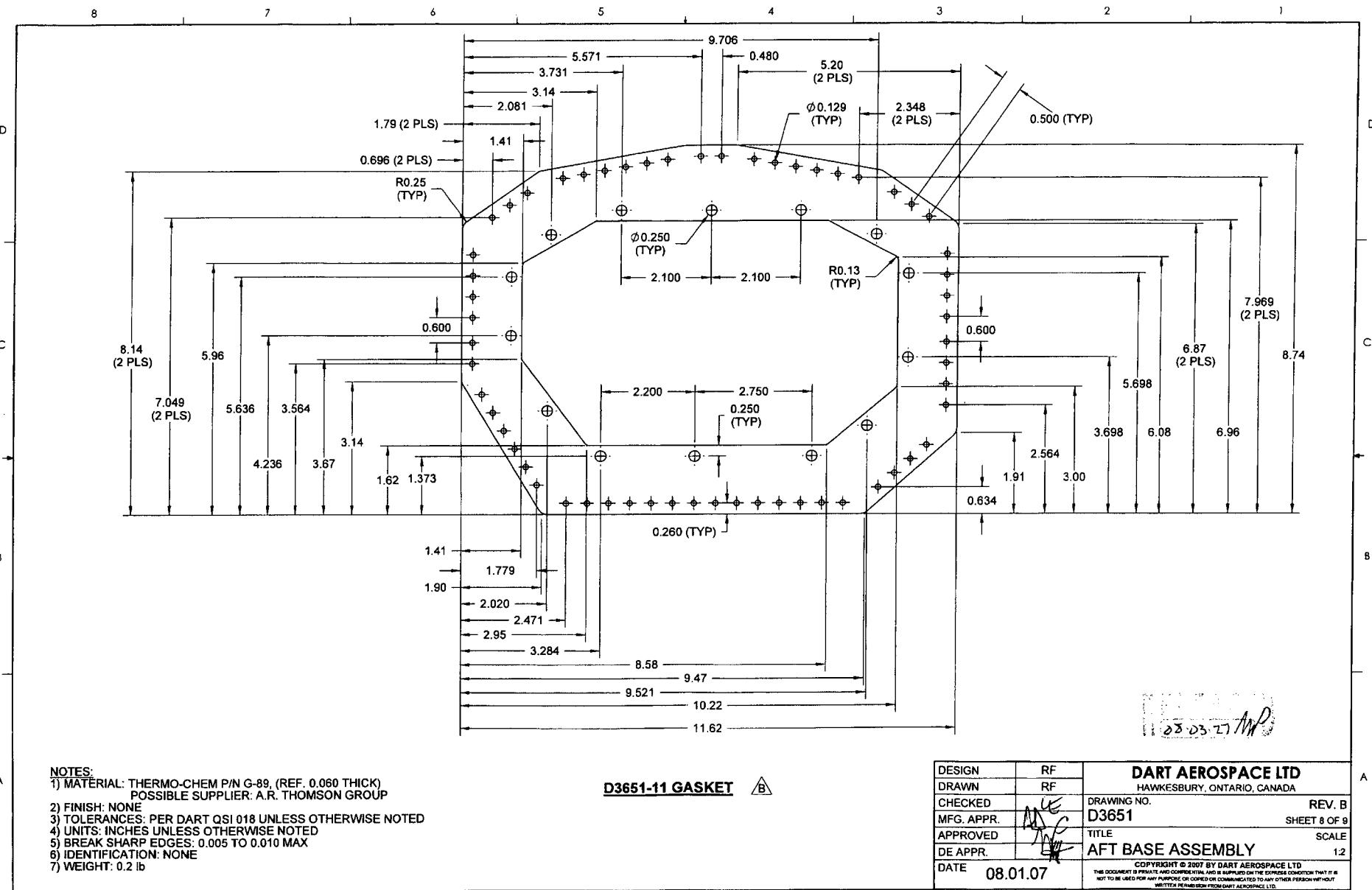






DESIGN	RF	<b>DART AEROSPACE LTD</b>	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>JK</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>JK</i>	D3651	SHEET 7 OF 9
APPROVED	<i>JK</i>	TITLE	SCALE
DE APPR.	<i>JK</i>	AFT BASE ASSEMBLY	
DATE	08.01.07	1:2	

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## NOTES:

- 1) MATERIAL: THERMO-CHEM P/N G-89, (REF. 0.060 THICK)  
POSSIBLE SUPPLIER: A.R. THOMSON GROUP
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.2 lb

**D3651-11 GASKET** 

DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKSBURY, ONTARIO, CANADA		
DRAWN	RF			
CHECKED	JK	DRAWING NO.	REV. B	
MFG. APPR.	AC	D3651	SHEET 8 OF 9	
APPROVED	TC	TITLE	SCALE	
DE APPR.	EW	<b>AFT BASE ASSEMBLY</b>		
DATE	08.01.07	1:2		

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